

EVIDENCES OF HEREDITY.

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NEUROLOGISTS in the practice of their specialty are perhaps able to produce stronger evidences to the support of the theory of heredity than any other class of professional men. That the nervous system is intimately associated with this process of transmission, no one will deny, and some observers go so far and classify such affections, as tuberculosis, cancer, etc., among the neuroses, because of their hereditary transmissibility.

I have lately had occasion to observe a family in which heredity played such an important rôle that I think the case worthy of being recorded.

Having been called to see a child suffering with cerebro-spinal meningitis, I learnt that the mother, who possessed a very small head, had lost three children previously with cramps, and furthermore that all had enormously developed heads. The child in question was also macrocephalic, and this led me to make a thorough investigation.

The father, a tailor, aged thirty-six years, although in good health, has been annoyed much of late with lung difficulty, which I surmise is of tubercular origin. The apex of the right lung shows signs of beginning consolidation, with moist crepitant râles, and the respiration is broncho vesicular in character. Of his parents and grandparents he knows but little, having immigrated to this country when quite young.

The mother's parents are still living and healthy. Out of a family of eleven children, six died with "cramps," one of croup, and four are living. The mother's history is as follows:

Age, 27; height, 4 feet 11 inches; weight, 110 pounds; complexion, fair; hair, brown; disposition, petulant, fractious; intelligence is much below mediocre. Early history: She had considerable trouble at dentition, otherwise has

always been in the best of health. She menstruated when thirteen years old, and married at nineteen.

Her present appearance is at once conspicuous, owing to the small size and slope of her head. The face, rather broad, offers nothing unusual. The two sides are symmetrical, the eyes, ears, lips, cheeks and nose are well developed, and perform their various functions without any disturbance. The forehead is elongated, somewhat triangular in shape. The head is moderately large just above the neck, then tapers cephalad, becoming pyramidal—a malformation sometimes called oxycephalus or sugar-loaf head. This anomaly, generally met with in idiots, epileptics, etc., is due to a premature union of the parietal with the temporal and occipital bones. The measurements taken a few days ago are as follows:

Circumference,	- -	48 centimeters.
Occipito-frontal, diameter,	14	"
Bitemporal,	" 13	"
Biparietal,	" 13	"
Occipito-mental	" 20½	"
Sub-occipito bregmatic	16	"

With the exception of the head, the rest of her person does not deviate from the normal.

Married in 1884, she has given birth to five children.

The first child, a boy, was born March 25, 1884, after a comparatively easy labor. The child's head was exceedingly small as compared with the rest of the body, and as a member of the family remarked, it was "no larger than an apple." Otherwise the child was well developed, nursed well, slept well, until the latter part of June, when its head began to increase rapidly in size. In July, 1885, it was taken with convulsions, and died twenty-four hours later.

The second child, a boy, was born March 25, 1886, after another easy labor. Its head was also very small, otherwise it was well developed, and was in good health until the first appearances of dentition, when the head began to grow rapidly in size, terminating in hydrocephalus. In February, 1887, it was seized with convulsions,

vomiting, head thrown backward, and three days before death became unconscious. It died February 13, 1887. The physician's diagnosis was "hydrocephalus with cerebro-spinal meningitis."

The third baby, a boy, was born September 3, 1887. The labor lasted but two hours, and the child appeared well developed except its head, which was likewise very small. About dentition time the head became macrocephalic and in April, 1891, it died, exhibiting all the symptoms of a basilar meningitis. The circumference of the head after death was sixty-four centimeters. Although three and one-half years old, he could neither walk, talk nor sit alone, and showed unmistakable signs of arrested cerebral development.

The fourth child, a girl, had a history similar to its predecessors; microcephalus at birth, becoming hydrocephalic at dentition, and dying in convulsions on May 2, 1891.

The fifth child, a girl, was born August 5, 1890. Its head was even smaller than any of the preceding children and remained so. In February she began to emaciate, her body and extremities being reduced to a mere skeleton. In June, 1891, she died with cramps.

None of these children appear to have had enlargement of the bones, joints or glands, and the lungs seemed to have been in good condition.

To review the case briefly, then, we have here a family of five children, microcephalic at birth, dying in convulsions before dentition, or else becoming hydrocephalic at this time and dying of meningitis, probably tubercular in character, later on. The father of this family has a history of tuberculosis; the mother, a microcephalus, offers symptoms of cerebral degeneracy. To my mind a soil more fertile for the propagation of neuropathic and psychopathic tendencies cannot exist. Being convinced of this fact, I informed the parents whose home had been made desolate by the mysterious but all-wise treatment of nature, and counselled them to live henceforth, if not a virtuous, then a sterile life.